UNITED
NATIONS

A

General Assembly

Distr.
GENERAL

A/CONF.151/PC/61
2 July 1991

Original: ENGLISH

PREPARATORY COMMITTEE FOR THE UNITED NATIONS
CONFERENCE ON ENVIRONMENT AND DEVELOPMENT
Third session
Geneva, 12 August-4 September 1991
Working Group I
Item 3 b of the provisional agenda

PROTECTION AND MANAGEMENT OF LAND RESOURCES: AGRICULTURE, ENVIRONMENT AND DEVELOPMENT

Report of the Secretary-General of the Conference

I. INTRODUCTION

1. The Preparatory Committee, at its Second Substantive Session, in decision 2/11 on protection and management of land resources, requested the Secretary General: (i) to draw the attention of the FAO/Netherlands Conference on Agriculture and Environment to documents A/CONF.151/PC/24 and A/CONF.151/PC/25; (ii) to present the results of this Conference to it at its third session; (iii) in collaboration with relevant international organizations to prepare a report on the role of financing institutions in the development of sustainable agriculture;

2. In complying with the first request, the Secretary General has drawn the attention of the FAO/Netherlands Conference on Agriculture and Environment to documents A/CONF.151/PC/24 and A/CONF.151/PC/25, making copies available in all relevant languages to participants at that Conference.

GE.91-61504/3363B

3. In order to answer the second and third requests of the Preparatory Committee, the Secretariat of the Conference has prepared the present report. The report is structured in three parts, namely: (i) a brief overview of some of the main issues concerning agriculture, environment and development; (ii) a report of the outcome of the FAO/Netherlands Conference; (iii) a progress report on the role of financing institutions in the development of sustainable agriculture.

4. The preparation of the report was carried out in close collaboration with the relevant agencies of the United Nations System, in particular the FAO, as well as with the contribution and support of the major financing institutions, including the World Bank, the regional development banks, UNDP, IFAD and others.

II. OVERVIEW OF SOME OF THE MAIN ISSUES INVOLVED IN AGRICULTURE, ENVIRONMENT AND DEVELOPMENT

5. The links between agriculture and environmental issues are direct and important. Expected changes in climate will have an important effect on agriculture, and will in turn be partly caused by methane emissions from rice paddies or livestock. Ultraviolet radiation, increasing because of ozone depletion, can affect crops and soil micro-organisms; air pollution affects crops and through them, human health. Soil degradation and desertification are a limiting factor in agricultural production and in turn agricultural practices are one of the important causes of this degradation; the clearing of forests for agriculture can increase vulnerability to erosion and loss of biological diversity; biological diversity is important as a source of genes for improving cultivars through biotechnology. Marine and freshwater pollution originate partly from agricultural runoffs and this can affect fisheries, which is an important link in the chain of food security. Toxic chemicals and hazardous wastes originate in part and in turn affect the productivity of agriculture.

6. In the social and economic sphere, the links are equally important. Consumption patterns, particularly in developed countries determine the focus of agriculture and the choice of crops worldwide. Demographic pressures and poverty have both positive and negative feedback loops that affect agriculture. International economic and trade patterns affect both the type of crops grown as well as the nutritional status of primary producing countries.

7. Special mention should be made of food security, and its special links with agriculture and the environment and the eradication of poverty and improvement of the quality of life. Food security is the condition when all people at all times have physical and economic access to the food they need. This is attained by a vigorous agricultural system; effective social and economic management; and economic independence that support livelihoods for all. Thus, the imperative of sustainable agriculture for food security is clear.

8. Meeting necessary demands for food arising from both population growth and improved economic conditions will have to be done primarily by intensification of food production, as few countries have major areas of

undeveloped land to be brought into cultivation. How to achieve this in a sustainable manner, both from the ecological as well as socio-economic point of view is the subject of much controversy.

9. A major aspect of the controversy relates to the management practices to be applied in the intensification of agriculture and to the effects of these practices on sustainability. Options range from high inputs of fertilizer and pesticides; to judicious use of fertilizers and use of integrated pest management and plant nutrition systems; to more radical departures from current practices which favour the limitation of external inputs through LEISA (low external input sustainable agriculture) and propose more environmentally friendly and socioeconomically accessible ecological or organic methods. The only manner in which these controversies can be resolved is probably through research and critical evaluation of the impacts, effects, productivity and costs of each of the approaches.

10. Other controversies arise in relation to agricultural policies and pricing systems; the role of agriculture as an economic activity vis-à-vis a social function; the role of agribusiness and industrial agriculture and of the small individual farmer; access to land and power structures and equity; and the role of trade in either facilitating or hindering food security at the local level. None of these issues is likely to be resolved without rigorous analysis since many of the different positions are ideological in nature.

11. A special word should also be said about the role of women in agriculture, food security and general management of land resources. In many countries, women play an important role as producers of food, sometimes producing the majority of the food that is consumed locally. However, because of discrimination based on gender, women are often excluded from legal tenure to land and are not given the credit or training necessary for them to become efficient producers. Any programme on sustainable agriculture must face this issue squarely and ensure that inequities and inefficiencies are resolved.

12. Conceptual and methodological problems also exist in regards of sustainable agriculture. The very concepts of sustainable development have not yet been defined beyond very broad terms. This naturally affects the definition given to the sustainability of agriculture, and in turn affects the operational significance that can be attached to different approaches and management practices. There is therefore a pressing need to define, in strict operational terms, what sustainability means in terms of the ecological, economic and social dimensions of agriculture.

13. If agriculture is to be sustainable and answer the needs of humankind for food and raw materials in the coming decades, it will have to answer all these environmental, economic and social challenges with vigour. Possibly the only way to achieve this is for greatly increased cooperation among nations and the application of sustainable practices at the local, national and regional level by the countries of the north and the south.

III. REPORT ON THE OUTCOME OF THE FAO/NETHERLANDS CONFERENCE ON AGRICULTURE AND ENVIRONMENT

Background, Scope and Organization

14. The convening of FAO/Netherlands Conference on Agriculture and the Environment resulted from the conjunction of a number of factors:

(i) a major resolution of the FAO Conference (no. 3/89) requesting the Organization to strengthen its activities in the field of environment and sustainable development; to respond positively to a UNEP Governing Council resolution (no. 15/24) to convene a joint meeting on sustainable agriculture; to lend full cooperation in the preparation of UNCED;

(ii) an offer to FAO by the Government of the Netherlands to support the organization of and host a conference on agriculture and the environment;

(iii) the interest expressed by the Preparatory Committee of UNCED in addressing several issues which relate principally to agriculture: land degradation in particular but also others where the stake of agriculture is important, such as water use, biodiversity, deforestation, biotechnology, and toxic chemicals, as well as cross-sectoral issues such as poverty, food security and environmental health, technology transfer and trade issues.

15. In view of these multiple demands, FAO and the Netherlands Government agreed to give a broad scope to the Conference by addressing the Strategies and Tools for Sustainable Agriculture and Rural Development (SARD) as a whole and to associate the UNEP and UNCED secretariats closely as well as other institutions concerned in its preparation.

16. The agenda and the main documents of the Conference addressed four subjects: the issues and perspective, the technological options, the strategies for areas with different resource endowments, and the instruments and tools of SARD. These four main topics were also analysed in background documents "vertically" for each sub-sector and component of SARD (land and water, crops, livestock, social aspects, etc.) and for each main developing region (Africa, Asia and the Pacific, Latin America and the Caribbean, and the Near East). In addition, miscellaneous documents were produced on this occasion on the related subjects of population, nutrition, legal aspects, climate change, rural energy and forestry. The documents were elaborated with the help of 16 resource persons and consultants originating from a wide range of geographic and professional backgrounds and several preparatory meetings in which UNCED, UNEP, UNESCO, WFP, IFAD and WMO participated, along with the consultants and resource persons. A progress report on the preparations was presented to the UNCED Prep. Com. session in March 1991 in relation with its discussions on land degradation.

17. All the FAO member countries, as well as the USSR, were invited to participate by sending senior officials or experts in matters related to agricultural policy and planning and environment protection. Invitations were also sent to international institutions concerned, both intergovernmental and non-governmental. Some 200 participants attended from 119 countries, 17 IGOs

and NGOs. The participating inter-governmental organizations included institutions with world-wide as well as regional and sub-regional mandates. NGOs ranged from environmental organizations and consumer organizations to agricultural producers and agro-chemical manufacturers associations.

18. The Conference was held in 's-Hertogenbosch (den Bosch in short), North Brabant Province, the Netherlands, from 15-19 April 1991. It was chaired by Mr. G. Braks, former Minister of Agriculture of the Netherlands, with Professor He Kang, former Minister of Agriculture of China as Vice-Chairman. The Director-General of FAO, Mr. Edouard Saouma, and the Minister of Agriculture of the Netherlands, Mr. P. Bukman, addressed the participants at the opening session. Beside the plenary sessions and regional working group sessions, the excellent facilities and the generous hospitality provided by the host government enabled participants to have a wide range of opportunities for informal dialogue and contacts, exchange of information and documents.

19. At the end of the Conference the participants discussed their draft conclusions and recommendation and then adopted by consensus a "den Bosch Declaration and Agenda for Action" which, together with the reports of the regional groups, constitute the report of the Conference.

The Den Bosch Declaration and Agenda for Action

A. The Den Bosch Declaration on Sustainable Agriculture and Rural Development

Preamble

20. By the year 2025, the world will have to feed an additional 3.2 billion people from a natural resource base which is already seriously threatened by unsustainable farming practices and environmental pressures arising from other human activities. Already now millions of people are caught in a poverty trap which forces them to eke out their livelihood at the expense of natural resources which are the sole means of their survival.

21. Moreover, for the coming decades, the needs for food, fibre and other agricultural products as well as energy have to be served, of a world population which is not only rapidly increasing, but also rapidly urbanizing and expecting improved living conditions. However, the resource base should be used rationally and sustainably to meet the needs of society but not for the greed of society.

22. Agriculture will have to meet these challenges, mainly by increasing the production on land already in use, and by avoiding further encroachment on land that is only marginally suitable.

23. It has been shown in the industrialized world that agricultural production can be greatly increased if the non-agricultural sectors of the economy provide, in return, the means to do so. However, intensification has often been accompanied by large demands on non-renewable resources, environmental pollution, problems of waste disposal, an accelerated rural exodus and the development of unsustainable production patterns.

24. The challenge for the world is to learn from past experience and to do better, in reconciling further development needs with environment protection requirements.

The prerequisites for SARD

25. To meet the above challenges, at least eight pre-requisites have to be met:

(a) Agriculture, both in the developed and in the developing world should be restructured in such a way that demands of sustainability will be met.

(b) The developed countries should recognize their role and responsibility for sustainable agriculture and rural development in developing countries by improving the international economic relations in order to increase and stabilize incomes for farmers and hence create incentives for appropriate investments in rural areas.

(c) The international community should accept the need to provide technical and financial assistance in specific fields to promote SARD; to review and improve rules governing international trade in order to provide better access to markets and ensure fair prices with a view to supporting strategies for SARD; and to strengthen development financing to make the necessary resources available on terns that will make investment in SARD feasible.

(d) Population policies should be implemented in order to improve, in the long run, prospects for sustainable development.

(e) Governments and society at large should recognize that agriculture and rural people collectively play the vital role of ensuring food security and maintaining the renewable natural resource base. For most developing countries, this recognition must be reflected in the allocation of adequate financial resources, pricing policies, in the decentralization of institutions and in the empowerment of rural people with particular attention to the poor.

(f) Fair terms of exchange should be established among agricultural producers, industry and consumers.

(g) Farmers, particularly small-scale and resource-poor farmers, men and women, should have better access to education and training, appropriate technologies and resources.

(h) Campaigns to increase public awareness of the need for and approach to SARD should be undertaken.

26. Meeting these pre-requisites will stimulate the development and adoption of innovative forms of agriculture and rural development and lead to the choice of production systems, technologies and practices that associate both intensification and diversification.

The Essential Goals of SARD

27. In evolving towards more sustainable production systems, agriculture and rural development efforts should ensure the attainment of three essential goals:

(a) food security by ensuring an appropriate and sustainable balance between self-sufficiency and self-reliance;

(b) employment and income generation in rural areas, particularly to eradicate poverty;

(c) natural resource conservation and environmental protection.

The Call for Fundamental Changes and Adjustments

28. In many regions, the above essential goals are not readily attainable. Major changes and adjustments are necessary to create the conditions of sustainability. This is particularly the case in the rural areas with high population density and on marginal lands where small farmers and landless people can barely subsist and are living in extreme poverty with no alternative but to survive at the expense of the limited natural resources available to them. Therefore the major thrust of the strategy for creating the conditions for sustainability for the poor must aim at eradicating poverty.

29. The fundamental changes and adjustments to promote SARD should include:

(a) active involvement and participation of rural people through their organizations such as farmers organizations, cooperatives and informal groups in the research and development of integrated farm management systems compatible with maintaining the essential biological processes, and related training activities;

(b) decentralization by devolving more decision-making authority and responsibility down to the local level, by providing incentives and resources for initiatives by local communities, by enhancing their status and management capacity, including that of women, rather than relying on "top-down" administrative mechanisms;

(c) allocating clear and fair legal rights and obligations with regard to the use of land and other natural resources, including land reforms where necessary; such allocation should pay particular attention to the important role of rural women as decision-makers, food producers and food providers;

(d) relieving pressure on natural resources by investing in improvement, rehabilitation and conservation of natural resources so that they can be used intensively and safely;

(e) adjusting macro-economic and agricultural policies and instruments to promote production systems and technologies that can help attain the objectives of SARD;

(f) encouraging demand and providing incentives favouring the crops and animals which can be produced and processed sustainably;

(g) promoting agronomic practices, production and processing systems that pay particular attention to safeguarding human health and environmental quality, especially in relation to the use of dangerous pesticides.

(h) promoting alternative off-farm livelihood opportunities in rural area, such as food processing and other industries, and, where necessary, facilitating the accommodation of migrating populations in better-endowed areas.

30. The Conference recognized that the challenge of overcoming poverty and translating the SARD concept into an operational reality is the responsibility of the world as a whole. It also recognized that the achievement of the objective of SARD would require consistent commitment of policies and adequate resources over an extended period of time. Therefore it stressed that the considerable costs involved in implementing the strategy for SARD should be met in such a way that there is no undue burden placed on poor countries or on the poor people of the world.

31. The practical implementation of the principles and objectives of SARD enunciated in this Declaration will require action on a broad front supported by adequate resources. Such action should involve the local communities, NGOs, government institutions, the international organizations and financing institutions in a common concerted effort.

32. Towards this end, the Conference has given clear guidance as to the areas for which actions are required, which have been brought together in the form of an "Agenda for Action".

B. <u>The Den Bosch Agenda for Action on Sustainable Agriculture and Rural Development</u>

33. "To meet the declared objectives of SARD, most developing countries will have no choice but to intensify agriculture. Experience in developed countries shows that intensification can lead to pollution and problems of waste disposal. Moreover it can encourage consumption patterns that are ecologically and economically unsustainable. Other forms of agriculture and rural development are therefore needed, requiring an appropriate balance between both intensification and diversification in the choice of production systems, technologies and practices.

34. The transition towards sustainable agriculture and rural development will require new investments and re-allocation of existing financial resources. As these adjustments are made, this may initially reduce the overall production and income of some producers. The agricultural sector may therefore require assistance from other sectors of the national economy and, in developing countries, from the international community.

35. The success of this Agenda for Action for SARD depends crucially on appropriate parallel action aimed at sustainable development in other sectors and on the part of the international community to create an international

economic environment favourable to sustainable development. The Agenda for Action presented below concentrates specifically on action required within the agricultural sector in relation with environment and sustainability concerns.

36. The major requirements for action at national level are:

(a) launching a process of macro-economic policy adjustment and agricultural policy review leading, where necessary, to the elaboration of local and national SARD plans and programmes, the establishment of appropriate mechanisms associating government and non-government interests, and the selection of appropriate tools and instruments for policy analysis and implementation, including the development of data bases and monitoring systems;

(b) accelerating the development of rural organizations, people's participation, improvement of livelihoods, involvement of local communities in the SARD process, with particular attention to rural women, small farmers and the landless: these efforts should be complemented by the provision of support services by NGOs and government institutions and other sources from the public and private sectors (see sub-paras (e) to (h) below);

(c) promoting human resource development through education, training and extension so as to increase the awareness of the need for systems approaches to sustainable agricultural development;

(d) ensuring in an integrated manner, community-based resource planning and management as well as related investment in key resource areas, namely:

* land (zoning and land-use planning, land rehabilitation and conservation involving biological approaches as alternatives or in addition to engineering ones);

* water (pricing and distribution, control of salination and waterlogging by investment in irrigation and drainage, as well as improved management and establishment of water use associations, protecting existing irrigation schemes by rehabilitation of watersheds);

* biological diversity (in situ and ex situ conservation and use of plant and animal genetic resources);

(e) providing, supporting services and training for the optimum use of on-farm inputs and the minimization of the use of external inputs while increasing productivity, particularly Integrated Plant Nutrition Systems (IPNS) and Integrated Pest Management (IPM) as well as the implementation of the FAO Code of Conduct on Pesticides at national level;

(f) providing supporting services and training for optimum use of local natural resources, particularly for the development and management of renewable energy sources(e.g. wind, biomass, solar);

(g) providing supporting services to promote diversification and integration of agricultural production systems and related activities in rural areas (e.g. traditional food crops, tree, crop and livestock farming systems, crop rotation, intercropping, agroforestry, integrated crop- livestock-tree systems, aquaculture, agro-industries, wildlife management and utilization);

(h) ensuring that relevant information is available and disseminated on main issues related to SARD, in order to enable rational decision-making and management;

(i) implementing, in view of the key role of research and technology, the following recommendations which are considered essential to the success of launching the process towards SARD. These are:

* to redirect and increase support for agricultural research and technology development towards the goals of sustainability, including attention to production systems and needs of small farmers. This requires the knowledge and use of traditional indigenous technologies as well as strategic research, especially on the biological processes that govern agricultural production. It will entail the development and adoption of a diversity of farming systems in which efficient utilization of external inputs (such as agro-chemicals and energy) is maximized and thus their use and impacts on the environment are minimized.

* to develop criteria, indicators and methods in order to assess and monitor the sustainability of agriculture, and the impact of technology, and in order to set up environmental and natural resource accounting systems.

* to strengthen in the developing countries the manpower and the capacities for agricultural research, technology transfer, extension and adoption by the farmers.

* to carry out inventories and study diverse forms of agriculture systems, including low external input sustainable agriculture (LEISA) and organic agriculture (OA) farming systems, and determine the scope of their agronomic, environmental and socio-economic viability in different farming and population density conditions, as well as evaluating their environmental and social performance. Such studies should also include the quantitative analysis of agricultural production systems in terms of production potentials in relation with population pressures on various agro-ecological zones, and of the inputs required. This should be an integral part of the review process for sustainable agricultural policies and plans.

37. International cooperative programmes which include financing mechanisms should be developed and used to support comprehensive SARD initiatives at the local, national and regional levels in these nine areas above. This will require cooperation and coordination among various actors (bilateral, and multilateral assistance, and financing institutions).

38. In addition, other international action of more general interest and applicability is needed. This includes:

(a) developing efficient and cost-effective data collection methods, as well as sharing relevant data already available, for instance those resulting from remote sensing; elaboration of information systems which can assist in improving data use, including methodologies and environmental accounting systems;

(b) setting codes of conduct and standards which will contribute to more sustainable practices in agriculture and other fields;

(c) reviewing and modifying as necessary the rules applicable to international trade, in order to improve market access and ensure fair prices with a view to promoting SARD;

(d) complementary to the above, available financing mechanisms should be improved and others possibly introduced to make available the necessary resources for SARD activities on terms that would make investment in sustainable development feasible. These may include widening the criteria and relaxing conditions for providing aid for SARD, including debt-for - SARD swaps.

39. The Conference recommended that FAO develop, with the support of and in association with other international organizations, an overall international cooperative programme framework to assist in meeting the needs for SARD mentioned above at national and international levels, including the requirements for scientific and technical advisory mechanisms.

40. The Conference recommended that the Den Bosch Declaration, together with the Agenda for Action, should be brought to the attention of the member governments of FAO and of the Preparatory Committee of UNCED for consideration and appropriate action. It further recommended that FAO should elaborate further the Agenda For Action on the basis of the Declaration and the document "Elements for Strategies and Agenda for Action (Draft Proposal)", taking into account the views expressed by the Conference participants."

C. Follow-Up to the den Bosch Conference

41. In line with the recommendations contained in the Agenda for Action, the results of the den Bosch Conference were brought to the attention of the FAO Committee on Agriculture in late April 1991 and to that of the FAO Council in June. In addition, an outline of the international cooperative framework was presented to the Programme Committee of FAO in May and the FAO Council in June. Both the FAO Committee on Agriculture and the Programme Committee welcomed the results of the Conference and the initiative taken. As the FAO Council is still in session at the time of the finalization of the present document, the UNCED Preparatory Committee will be informed of the outcome during its third session.

42. Further steps by FAO include, after receiving the reactions and recommendations of the FAO Council and of the UNCED Preparatory Committee, to elaborate the SARD strategy and plan of action further, in particular the elements of the ICPF/SARD in consultation with the other parties concerned, and to present more detailed proposals at the twenty-sixth session of the FAO Conference while, at the same time, contributing inputs and comments to the further preparation of the Agenda 21 in this field.

43. Other follow-up action to the den Bosch Conference includes the contribution of inputs to the preparations of the documents for the third session of the Preparatory Committee, through the UNCED Working Parties, in particular for the elaboration of the Agenda 21 in related areas such as water, climate, biodiversity and toxic chemicals.

44. The results of the den Bosch Conference were brought to the attention of the sixteenth session of the UNEP Governing Council in May 1991, the ACC Task Force on Rural Development, the International Federation of Agricultural Producers and several other institutions and bodies. This process of information on and dissemination of the results of the den Bosch Conference will continue and should facilitate further consultations on the contents and modalities of the ICPF/SARD.

45. The Preparatory Committee may wish to advise on the scope and process of further consultations in order to mobilize the widest participation in the follow-up of the recommendations of the FAO/Netherlands Conference as part of the further preparations for UNCED.

46. At the present stage of elaboration, it is contemplated that the ICPF/SARD would include the following major components in response to the recommendations of the den Bosch Agenda for Action:

(i) integrated programmes aiming at the introduction of the SARD goals and strategy at three levels:

    (a) sector policy level;

    (b) rural community level;

    (c) farming system level;

(ii) support programmes focusing on critical bottlenecks in the attainment of SARD objectives, namely:

    (a) the sustainable conservation and use of natural resources for agriculture and rural development: land, water and biodiversity (including plant and animal genetic resource programme);

    (b) the safe and sustainable use of key inputs for soil productivity management, pest control and rural energy development.

47. Each of these programmes should include relevant elements dealing with information and analysis, normative measures, economic instruments, capacity building, research and technology transfer, investment support and related international cooperative activities (e.g. TCDC, networks, technical and financial assistance). Many of these programme elements are already covered by national and international activities and the purpose of the ICPF/SARD would be to streamline and develop further these activities within a common framework of objectives and programme goals and to facilitate the mobilization and channelling of the resources required to this effect.

48. The financial resources required should come from structural adjustment in public revenue generation and reallocation of expenditures at the country level, and from structural adjustments in the allocation of expenditures, grants and loans by donors (bilateral, multilateral and international and domestic NGOs).

49. Further, in the case of many developing countries, the accelerated transformation of agriculture will require net additionality in financial and technical assistance from the donor community on terms which will not exacerbate their debt and trade problems.

50. The reallocation of financial resources and mobilization of additional resources for many countries will be facilitated if the process is oriented by a shared view of the priorities, opportunities and constraints in SARD within a flexible system for accumulation, analysis and exchange of information among the various "actors" at the local (resource user), national, regional and international levels. It is anticipated that the ICPF/SARD, in assessing priorities at the above four "actor" levels and in facilitating a cumulative process for developing and exchanging information, will be progressively refined as it evolves. In this report, an effort is made to set out what appears to be the critical building blocks around which dialogue can be initiated on options for cooperation and on perceptions of the associated costs and benefits in promoting SARD through such cooperation.

IV. THE ROLE OF FINANCING INSTITUTIONS IN THE DEVELOPMENT OF SUSTAINABLE AGRICULTURE

General considerations

51. Agricultural credit is provided by a variety of financing institutions at both the international and local levels and each of these systems operates on different scales and with a different emphasis. According to the OECD, overall direct donor support to agriculture has been maintained at about 16% over the past decade. In addition to this direct support, substantial amounts of assistance which are relevant to agriculture are provided. This includes general funding for action in the rural areas, such as that given for education, health and infrastructure.

52. The focus here will be mainly on the large international financing institutions, although the importance of bilateral donor funding and funding by local institutions cannot be discounted. In fact, when promoting sustainable agriculture, local institutions can probably operate with a greater sensitivity to local needs and conditions. The institutions considered in the present report include major international actors such as the World Bank, and the regional development banks. Financing institutions within the United Nations system, and recipients of their support, including the UNDP and IFAD and the FAO and the WFP were consulted.

The main focus of agricultural financing

53. The emphasis given by the financing institutions when providing credit or grants for agriculture has evolved over the past four decades. From a direct approach to financing agricultural production and infrastructure, there has

been, in the last few years, a growing interest in supporting projects which address environmental concerns and individual key elements of sustainable agriculture. These include land zoning, soil conservation, integrated pest control, genetic resources conservation, integrated farming systems. More comprehensive approaches that give attention to social issues and promote integrated rural development, or peoples participation is also becoming common. But the long term sustainability of these projects is still rarely addressed.

54. Present attempts to promote sustainable agriculture, taking into account all aspects are still fragmentary. There is a need for a coherent action framework that allows to address all the essential aspects involved in sustainable agriculture, including environmental, social and economic issues at both the national policy level as well as the local programme level. Many of the major international financing institutions have made progress of late in this direction, taking important steps to revise their policies, lending practices and project emphasis. It is however too early to determine how far this has had an impact in the field, and to what degree projects funded are indeed sustainable in the long term.The current situation is briefly described below.

Policies and institutional modalities of financial institutions

55. With some notable exceptions the financing institutions have not developed clear policies, strategies and guidelines regarding sustainable agriculture, even though many of them have policies and well defined priorities regarding financing, including for agriculture. There has been a move to voice concern about sustainable agriculture at the policy level, but it is not clear that this has led to a definition of the long term requirements of sustainable agriculture, nor to systematically address the full range of issues involved.

56. Overall policies, as articulated in the Development Assistance Committee's 1989 statement on Development Cooperation in the 1990's calls for the "... build-up or rehabilitation of productive capacity in agriculture ..." in the context of major action to avoid irreparable damage to the resource base and natural environment. It is not clear to what extent this type of pronouncement and overall concern for environmental issues has actually lead to concern for the sustainability of agriculture or has actually permeated the field level.

57. One sign of changing priorities is the recent shift in the concerns of the Consultative Group on International Agricultural Research (CGIAR). Here there is increasing attention given to cropping systems, In addition to their historical concern for the development of particular crop varieties and fertilizer use, increasing attention is now being given to cropping systems and more efficient use of fertilizer, within the broader framework of sustainable plant nutrition and overall fertility.

58. The IFAD has, as a mandated priority, put emphasis on the alleviation of poverty and of increasing food production to address the needs of the poorest segment of the population. This strongly social focus emphasizes participation,

the involvement of women and respect for indigenous peoples. In addition, IFAD has adopted a series of environmental principles and criteria which stress the efficient use of natural resources within the bounds of their regenerative capacity. IFAD endeavours to ensure that the projects they fund do not do unnecessary damage to resources such as forests, wildlife and others and that chemical use will be reduced to the fullest extent practicable.

59. The World Bank has taken steps to develop a series of indicators to define sustainable agricultural development, in terms of the types of activities that can be considered to contribute to the achievement of sustainable agriculture. These include agroforestry; soil and water conservation/management; irrigation/management; land reclamation; pest management; institution building for sustainable agriculture; watershed, nutrient, crop and pasture management.

60. The African Development Bank has recently revised its agricultural sector policy to take account of environmental issues. The emphasis of the new policy is on improvement of agricultural productivity in the region, contributing to food security and providing raw materials for industry; improving the overall economic situation, generating surplus capital in the agricultural sector, raising levels of disposable income, increasing aggregate productivity of development investment; improving the nutritional status of populations and enhancing the capacity to meet other basic needs through increased earnings; protecting the resource base for sustained productive use in the future. The guiding principles behind this policy are to work with the diversity of the region, use agriculture as an engine of growth, recognize the importance of intersectoral linkages, and giving particular importance to dealing with problems that are "internal" to national systems (e.g. policies or practices), and thus more easily addressed, albeit taking account of "external" problems that are beyond human control (e.g. weather).

61. The Asian Development Bank has defined a policy framework which stresses a variety of elements in the pursuit of sustainable agricultural development, among which the rationalization of the policy environment to promote renewable production systems, the decentralization of administration and planning, continued productivity increases, technology transfer. In this context, the Bank has made an effort to define economic policies for sustainable development that incorporate, in addition to the social and economic dimensions, those of environmental protection. This includes appropriate strategies for sustainable management of natural resources that incorporate specific protective and mitigative measures

62. The Interamerican Development Bank has recognized attempts to define a working definition of sustainable development as the relationship between the availability of natural resources, the increasing use of those resources and the importance of natural resource management as part of the decision making processes which affect economic growth and development. Therefore, the support to the development of agriculture is based on efficient and sustainable growth and rural poverty alleviation. Policy guidelines for the agricultural sector put emphasis on sustainability and on management of natural resources. For example, attention is given to water management,

including problems that arise through irrigation, such as salinization or waterlogging. Special efforts are made to improve and rationalize the use of agro-chemicals, especially pesticides.

63. Overall investment decisions by the financing institutions eventually determine programme and funding directions. Prime examples of the determining processes in this area is that of the round tables organized by the UNDP or the Consultative Groups called by the World Bank. This process generally calls for the establishment of a broad macro policy framework across sectors followed by sector reviews with project identification within this framework. At present, it is very difficult to ensure that long term issues of food security and sustainable agriculture are adequately addressed in development assistance packages. It has been suggested that the need for sustainability of the food and agricultural sector is so important, that it would be advisable to consider it at the outset and that these concern should play a central role in setting the overall macro policy framework.

64. The development of environment units, divisions or departments in the financing institutions has led to a certain contradiction between programs for socio-economic development and environmental management. Besides making some general studies and supervising work on environmental impact assessment, these environment units have often developed their own field programmes of assistance to counterpart institutions at the national level. These programmes have usually consisted of a collection of activities related to nature conservation and pollution control, environmental legislation, standard setting, monitoring, institution building and training. These activities have not always emphasised the reconciliation of environmental and developmental issues, and have therefore, in the view of some critics, not facilitated the advancement of sustainable development in the field.

65. Most of the institutions have guidelines to ascertain the economic viability and impact of projects and some have separate guidelines on environmental impact assessment. Many institutions have incorporated questions of sustainability into their accounting systems, as well as environmental indicators for monitoring purposes. In recent years, the donor community, including both bilateral donors and multilateral institutions have been setting in place systems for environmental impact analysis in most programme areas, including agriculture. Some of these procedures are becoming increasingly sophisticated. However, the overall record to date in the application of these procedures appears not to have been very positive. In some instances, environmental assessment is either not done at all, or done after projects have been initiated. Also, the definition of when environmental impact assessment is required, and how these assessments are to be conducted may, in certain cases, obscure potentially dangerous situations. Through practice, these problems can no doubt be removed.

Programme and funding directions

66. The major programme and funding directions of the various financing institutions vary considerably in terms of priority emphasis, areas covered and relative amounts of financial resources disbursed. A few examples are given below, as an indication of the range that exists, but does in no way purport to be comprehensive.

67. The International Fund for Agricultural Development (IFAD) has, in the 12 years since its inception, allotted a total of $US 3.12, billion for rural development, including agriculture. Current projects under implementation include 161 loans for a total of 157 projects, of which 45% are in Africa, 26% in Asia, 13% in Latin America and the Caribbean and 16% in the Near East and North Africa. These programmes fall under the Regular Programme and the Special Programme for Sub-Saharan African Countries Affected by Drought. Over the past years the investment priorities of IFAD have changed, moving from co-financing of large schemes to focusing on the needs of the poor and on environmental issues, providing credit for small scale, farmer managed systems

68. The World Bank has put increasing emphasis on the incorporation of sustainable agriculture elements into project design. In 1986, out of the 61 projects approved, 72% contained elements defined by the Bank as sustainable agriculture; this increased to 77% for 1987, in the 58 projects approved; and went up to 84% for 1988 in the 56 projects approved. Three categories have been designated to describe the sustainable agriculture projects of the Bank, namely free-standing sustainable agriculture projects, projects with sustainable agriculture elements and projects without these elements. Overall data, as analysed by the Bank, suggest that over 80% of the financing for agriculture emphasizes sustainability. It should be noted however that investment in the agricultural sector as a whole represents only a fraction of total investment by the Bank. Of the total number of agricultural projects, those for the African region are the highest (112), followed by Latin America and the Caribbean (LAC) (49) and EMENA(48). Total Bank lending however followed a different pattern, with $US 6.8 billion for Asia, $US 5.6 billion for LAC, $US 3.7 billion for EMENA and $US 3.3 billion for Africa.

69. The African Development Bank lending for agriculture stresses rainfed food crops, export and industrial crops, livestock and special livestock species strategies for cattle, small ruminants, poultry and wildlife. Another area of emphasis is strengthening of institutions, which includes strengthening research, training and development of the private sector in areas such as veterinary services. Other subsectors related to agriculture include forestry and fisheries. The total disbursement for the agricultural sector by the Bank, for the period 1967-1990 amounts to approximately 567 million account units (UA) over a total of 4,203 million. The value of the UA has fluctuated between $US 1 in 1967 to $US 1,42 in 1990.

70. Agriculture and agro-industry have been the Asian Development Bank's leading operational sector. For example, for the year 1990, loans comprised 29% of the total amount of loans, with 329 projects a disbursement of approximately $US 9.5 million; technical assistance activities comprise around 46% of operations, with a total of 589 projects and a disbursement of approximately $US 1,998 million. These activities have been directed to industrial crops and agro-industry, irrigation, rural development, livestock, forestry, agricultural support services and fertilizer production. Emphasis has also been placed on appropriate strategies for environmentally sound and

sustainable management of natural resources, tailored to the specific needs and resource endowments of different areas. Although the Bank recognizes that suitable techniques and technologies do not exist for all situations, there are general principles that can be applied to advantage. The focus here is on various land and natural resources that are typically dealt with in relation to agriculture, including those for irrigated areas, for low potential areas, forests, livestock, fisheries and biodiversity.

71. The Caribbean Development Bank has allotted 16% of its net approvals since 1970 - for agriculture,and related sectors such as forestry and fisheries. The main emphasis has been on regional integration, exploitation of comparative advantages, efficient import substitution and development of intra and inter sectoral linkages. In particular, this broad approach has been set in place through activities that provide essential support services, such as feeder roads and marketing facilities. This rubric accounts for the almost totality of support, followed crop farming and forestry activities.

72. The Interamerican Development Bank's lending for agriculture, including fisheries, has accounted for 21% of their total activities. These have covered such varied activities as agricultural, livestock and forestry production, environmental management, organization and training of beneficiaries; consolidation of settlements, land tenancy mapping and titling, construction of rural roads marketing facilities an other related services that support agriculture. Up to the end of 1990, the Bank has approved 1,846 loans for a total of $US 47 billion, which financed projects representing investments of more than $US 136 billion. Following guidelines negotiated with local institutions of member countries, the Bank also financed parts of the cost of projects through the funding of some 510 loan operations for the equivalent of $US 10.9 billion; the total cost of the projects was approximately $US 30 billion. Around 41.3% of this was to strengthen the national agricultural financial system.

Future directions

73. Most, if not all, the financing institutions have plans to continue with their work on sustainable agriculture, expanding the programmes to put more emphasis on issues that are known to impact the sustainability of agriculture development. These issues include addressing climate and global change; establishment of climate and radiation regulations; preservation of biological diversity; promotion of proper waste disposal; provisions for nutritional security; and the achievement of intergenerational equity in development programs. For example, future operational programs of the Asian Development Bank will be directed to marine and land resource evaluation and planning, management of sloping lands for sustainable agriculture; regreening and reforestation of degraded lands, management of mangroves and development of coastal areas, rehabilitation and management of critical watersheds, integrated pest management, conservation of biodiversity and tropical ecosystems, institutional strengthening of EIA, and global warming.

74. Recent trends also show a move towards some interventions at the macroeconomic level, including pricing policy, taxation and marketing reform. This allows to address some of the underlying problems that condition

unsustainable practices. But the analysis must go further, and address broad issues such as trade patterns and the effect on the sustainability of agriculture as well as more specific issues such as the use of incentives and disincentives that can direct resource use along sustainable paths. Likewise, there is a move to address social issues and impacts more forcefully. Issues that have to be tackled here are questions of alleviation of poverty, equity in income distribution and the consideration of groups that have been marginalized in the past, including the small farmer and women.

75. The focus and modalities of financing also need to receive attention, as does the manner of targeting recipients of agricultural credit. Alternatives for the provision of funds and credit could be found, on the basis of existing and interesting experiences for cooperative and rural credit and extension banking organizations which reach out to the poorest sections of the population. Examples include the Grameen Bank in Bangladesh, the Planter's Bank in the Philippines, the Calmeadow Foundation of Canada. These institutions target small and/or resource poor farmers and are supportive of sustainable agriculture as they provide strong local economic bases for community development, and answer farmers needs in a direct way, as opposed to the prevalent approach to the financing of the agricultural sector which often targets export production. The IFAD, in exploring this bottom-up approach has redistributed up to 47% of it's funds to rural micro-enterprise projects that focus on long-term sustainability.

76. These are positive developments. However, there is a need to critically assess the long term sustainability of current programmes in environmental, social and economic terms and to modify them as necessary. But beyond the analysis of individual projects, there is a need to evaluate the relative role of agriculture in the overall development process, particularly as it addresses issues of fundamental social importance, including the satisfaction of people's food needs.